



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Adress: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,178	05/22/2006	Kaoru Yokota	2006 0680A	4029
52349	7590	12/18/2009		
WENDEROTH, LIND & PONACK LLP. 1030 15th Street, N.W. Suite 400 East Washington, DC 20005-1503			EXAMINER	
			ZUNIGA, JACKIE	
			ART UNIT	PAPER NUMBER
			2458	
			MAIL DATE	DELIVERY MODE
			12/18/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,178	Applicant(s) YOKOTA ET AL.
	Examiner JACKIE ZUNIGA	Art Unit 2458

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 November 2009.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8, 10 and 13-15 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 13 is/are allowed.
 6) Claim(s) 1-8, 10, 14 and 15 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 22 May 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

1. Claims 1-8, 10, 13-15 are presented for examination.
2. Claims 1 and 13-15 are amended.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/09/2009 has been entered.

Allowable Subject Matter

4. Claim 13 is allowed. The Examiner recommends incorporating allowable subject matter from claim 13 into claims 1, 14, and 15.

Response to Arguments

5. Applicant's arguments filed 11/09/2009 have been fully considered but they are not persuasive. The reasons set forth below.

The Applicant argues:

- (1) Nakano fails to discloses or suggest that the index information output unit outputs only the index information that indicates the device key and is converted by a

video processing unit into a data format that is displayable on a screen of a display apparatus, as recited in claim 1 [Remarks, page 11].

The Examiner respectfully disagrees with these arguments.

As per the first argument,

Nakano discloses a reproduction apparatus that utilizes ID information for decrypting content. In Nakano's system a recording medium is loaded into the reproduction apparatus, and based on the ID information previously stored in the reproduction apparatus, it analyzes the header information stored in the recording medium to specify the position of the encrypted media key to be decrypted and the device key to be used. Nakano's system utilizes only the ID information for accessing the device key that will be used for decrypting the media key; the reproduction apparatus will then decrypt the content with use of the obtained media key [fig. 9, paragraphs 0193, 0213-0216].

Claims 13-15 recite language similar to claim 1; therefore the arguments pertaining to claim 1 above also apply to claims 13-15.

As per dependent claims 2-8, and 10, Applicant has not made specific arguments pertaining to why the cited references do not teach the recited claims. Without such arguments, the Examiner cannot respond and is not persuaded by such argument.

Claim Objections

6. Claim 15 is objected to because of the following informalities: Examiner recommends changing the limitation to --...outputting only the converted index ...--, as disclosed in Claim 14.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-8, 10, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. (hereinafter Nakano), U.S. Publication No. 2003/0081792, as cited by applicant in IDS, in view of Takashima et al., (hereinafter Takashima), U.S. Publication No. 2006/0227973.**

9. **As per claim 1, Nakano discloses a content reproduction apparatus which reproduces a digital content [fig. 1, paragraph 0002, 0005, digital work system 10, for performing reproduction of content], the content reproducing apparatus comprising**

A secret information storage unit [fig. 1, key information storage unit 301] operable to store a device key corresponding to the content reproduction apparatus, and the device key being stored in the secret information storage unit such that the device key cannot be accessed from outside of the content reproduction apparatus [fig. 1, 8, 10, paragraphs 0009, 0026, 0191, 0195, 0227, key information storage unit 301 for storing device key information, the device key may only be accessed by a user if purchased with a user apparatus];

A cryptographic processing unit operable to decrypt an encrypted digital content, corresponding to the digital content, the encrypted digital content being encrypted using the device key stored in the secret information storage unit [fig. 8, 10, paragraphs 0206-0211, encryption unit 304 receives media key information and reads content from the content storage unit, next the encryption unit 304, encrypts the read content with the use of the received media key];

An index information storage unit [fig. 8, key information storage unit 301] operable to store index information, the index information indicating the device key stored in the secret information storage unit such that the index information can be accessed from outside of the content reproduction apparatus [fig. 8, paragraphs 0193-0198, based on the ID information stored by the recording apparatus, the position of the encrypted media key and the device key that is to be used may be determined];

An index information output unit operable to output, only the index information [fig. 2, 9, paragraph 0179, 0193, 0213-0216, based on the ID information in the reproduction apparatus 400a, analyze the header information stored in the recording

medium 500c to specify the position of the encrypted media key to be decrypted and the device key to be used].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information corresponding to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose:

A video output unit operable to connect to a display apparatus that is distinct from the content reproduction apparatus;

An instruction receiving unit operable to receive, from outside of the content reproduction apparatus, an instruction for outputting the index information from the index information storage unit;

A video processing unit operable to convert the index information stored in the index information storage unit into a data format that is displayable on a screen of the display apparatus.

However Takashima discloses converting data recorded on a recording medium and display it on a receiver device [fig. 25, paragraph 0295], and

A video output unit operable to connect to a display apparatus that is distinct from the content reproduction apparatus [fig. 26, paragraph 0427, the reproduced content is transmitted from the information recording medium loaded on the recording and reproducing apparatus 711 to such a content reproducing device 714 having output means like a display monitor as a TV or a PC];

An instruction receiving unit operable to receive, from outside of the content reproduction apparatus, an instruction for outputting the index information from the

index information storage unit [paragraphs 0105, 0437, 0457, the information processing apparatus selects content subject to reproduction from content stored in an information recording medium, this processing is executed on the basis of the user input through an input means connected to the information processing apparatus];

A video processing unit operable to convert the index information stored in the index information storage unit into a data format that is displayable on a screen of the display apparatus [fig. 5, 7, 24, paragraphs 0024, 0025, 0105, the title information and the index information are presentable to the user, the index is a content title that is presented onto a display, this index is recognizable by the user];

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

10. **As per claim 2,** Nakano discloses the content reproduction apparatus according to Claim 1,

Wherein the index information stored in the index information storage unit is encrypted according to a predetermined cryptographic method [fig. 2, paragraph 0009,

0026, 0176, 0178, key information generation unit 107 generates an encrypted media key];

Wherein the index information output unit includes:

A decryption unit operable to decrypt, based on the instruction, the encrypted index information stored in the index information storage unit according to the predetermined cryptographic method [paragraphs 0026, 0179, a decryption unit operable to generate a media key from an encrypted media key];

An output unit operable to output the index information decrypted by the decryption unit [fig. 8, paragraph 0204, decryption unit 302 outputs the generated decrypted media key].

However Takashima discloses a display apparatus [fig. 26, paragraph 0427, the reproduced content is transmitted from the information recording medium loaded on the recording and reproducing apparatus 711 to such a content reproducing device 714 having output means like a display monitor as a TV or a PC].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

11. **As per claim 3,** Nakano discloses the content reproduction apparatus according to Claim 1,

Wherein the index information stored in the index information storage unit is encrypted according to a predetermined cryptographic method [fig. 2, paragraph 0009, 0026, 0176, 0178, key information generation unit 107 generates an encrypted media key];

Wherein the index information output unit outputs, based on the instruction, the encrypted index information stored in the index information storage unit [fig. 2, paragraph 0179, key information generation unit 107 outputs the generated encrypted media key].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose a display apparatus.

However Takashima discloses a display apparatus [fig. 26, paragraph 0427, the reproduced content is transmitted from the information recording medium loaded on the recording and reproducing apparatus 711 to such a content reproducing device 714 having output means like a display monitor as a TV or a PC].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content

reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

12. **As per claim 4,** Nakano discloses the content reproduction apparatus according to Claim 1, but he does not explicitly disclose:

An authentication data storage unit operable to store authentication data that is obtained by performing a predetermined conversion on the index information.

However Takashima discloses:

An authentication data storage unit operable to hold authentication data that is obtained by performing a predetermined conversion on the index information [fig. 34, paragraphs 0049, 0050, 0302, 0497, 0498, an authentication processing section for executing authentication processing].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including an authentication mechanism as disclosed by Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, preventing any unauthorized duplication of content [Takashima, paragraphs 0003, 0008-0013].

13. **As per claim 5,** Nakano discloses the content reproduction apparatus according to Claim 1,

Wherein the index information output unit outputs the index information stored in the index information storage unit [fig. 2, paragraph 0179, key information generation unit 107 outputs the generated encrypted media key].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose a display apparatus.

However Takashima discloses a display apparatus [fig. 26, paragraph 0427, the reproduced content is transmitted from the information recording medium loaded on the recording and reproducing apparatus 711 to such a content reproducing device 714 having output means like a display monitor as a TV or a PC].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

14. **As per claim 6**, Nakano discloses the content reproduction apparatus according to Claim 5,

Wherein on the recording medium, a unique identification number is recorded [paragraph 0009, organization assigns recording apparatus with a device key identification number];

Wherein the instruction receiving unit reads the program and the identification number from the removable recording medium on which the program is recorded [paragraphs 0009, 0025, 0099, 0595, recording medium is loaded and the apparatus extracts encrypted media key corresponding to the key identification number, and the key management program recorded to assist the key management apparatus achieve its function];

Wherein the index information output unit outputs, the index information stored in the index information storage unit, the index information being output by executing the read program only when the identification number satisfies a predetermined condition [paragraph 0009, apparatus will extract the encrypted media key corresponding to the identification number assigned to the apparatus].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose a display apparatus.

However Takashima discloses a display apparatus [fig. 26, paragraph 0427, the reproduced content is transmitted from the information recording medium loaded on the recording and reproducing apparatus 711 to such a content reproducing device 714 having output means like a display monitor as a TV or a PC].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

15. **As per claim 7,** Nakano discloses the content reproduction apparatus according to Claim 1, but he does not explicitly disclose:

Wherein the instruction receiving unit is operable to receive the instruction from a communication terminal via a computer network;

However Takashima discloses:

Wherein the instruction receiving unit is operable to receive the instruction from a communication terminal via a computer network [paragraphs 0105, 0437, 0457, the information processing apparatus selects content subject to reproduction from content stored in an information recording medium, this processing is executed on the basis of the user input through an input means connected to the information processing apparatus].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by

Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

16. **As per claim 8,** Nakano discloses the content reproduction apparatus according to Claim 1, but he does not explicitly disclose:

Wherein the instruction receiving unit is operable to receive the instruction from a debug apparatus connected to the content reproduction apparatus.

However Nakano discloses a need for a system that will efficiently determine key assignment for the user apparatus for the content reproduction [paragraphs 0024, 0025, 0026].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assume that efficiency may include utilizing a debug terminal to avoid any errors; hence an ordinary skilled artisan would find using a debug terminal obvious.

17. **As per claim 10,** Nakano discloses the content reproduction apparatus according to Claim 1,

Wherein the index information stored in the index information storage unit is encrypted according to a predetermined cryptographic method [paragraph 0009, 0026,

0176, 0178, apparatus encrypts media keys using device keys to generate encrypted media keys];

Nakano does not explicitly disclose wherein the display apparatus displays the encrypted index information.

However Takashima discloses:

Wherein the display apparatus displays the encrypted index information [fig. 5, 7, 24, paragraphs 0024, 0025, 0105, 0152, the title information and the index information are presentable to the user, the index is a content title that is presented onto a display, this index is recognizable by the user].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

18. **As per claim 14,** Nakano discloses a method for controlling a content reproduction apparatus [fig. 1, paragraph 0002, 0005, 0025, digital work system 10, for performing reproduction of content], the content reproduction apparatus storing a device key that corresponds to the content reproduction apparatus, the device key being stored in the content reproduction apparatus such that the device key cannot be accessed

from outside of the content reproduction apparatus [fig. 1, 8, 10, paragraphs 0009, 0026, 0191, 0195, 0227, key information storage unit 301 for storing device key information, the device key may only be accessed by a user if purchased with a user apparatus], the content reproduction apparatus decrypting an encrypted digital content using the stored device key to reproduce a digital content, the content reproduction apparatus storing index information that indicates the stored device key [fig. 8, 10, paragraphs 0206-0211, encryption unit 304 receives media key information and reads content from the content storage unit, next the encryption unit 304, encrypts the read content with the use of the received media key], and the index information being stored in the content reproduction apparatus such that the index information can be accessed from outside of the content reproduction apparatus [fig. 8, paragraphs 0193-0198, based on the ID information stored by the recording apparatus, the position of the encrypted media key and the device key that is to be used may be determined], the method comprising:

Outputting only the converted index information [fig. 2, 9, paragraph 0179, 0193, 0213-0216, based on the ID information in the reproduction apparatus 400a, analyze the header information stored in the recording medium 500c to specify the position of the encrypted media key to be decrypted and the device key to be used].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information corresponding to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose a display apparatus:

Receiving, from outside of the content reproduction apparatus, an instruction for outputting the index information from an index information storage unit of the content reproduction apparatus;

Converting the stored index information into a data format that is displayable on a screen of the display apparatus, the stored index information being converted based on the received instruction.

However Takashima discloses converting data recorded on a recording medium and display it on a receiver device [fig. 25, 26, paragraph 0295, 0427], and

Receiving, from outside of the content reproduction apparatus, an instruction for outputting the index information from an index information storage unit of the content reproduction apparatus [paragraphs 0105, 0437, 0457, the information processing apparatus selects content subject to reproduction from content stored in an information recording medium, this processing is executed on the basis of the user input through an input means connected to the information processing apparatus];

Converting the stored index information into a data format that is displayable on a screen of the display apparatus, the stored index information being converted based on the received instruction [fig. 5, 7, 24, paragraphs 0024, 0025, 0105, the title information and the index information are presentable to the user, the index is a content title that is presented onto a display, this index is recognizable by the user].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by

Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

19. **As per claim 15**, Nakano discloses a computer-readable recording medium having a program recorded thereon, the program being used in a content reproduction apparatus [fig. 1, paragraph 0002, 0005, 0025, digital work system 10, for performing reproduction of content], the content reproduction apparatus storing a device key that corresponds to the content reproduction apparatus, the device key being stored in the content reproduction apparatus such that the device key cannot be accessed from outside of the content reproduction apparatus [fig. 1, 8, 10, paragraphs 0009, 0026, 0191, 0195, 0227, key information storage unit 301 for storing device key information, the device key may only be accessed by a user if purchased with a user apparatus], the content reproduction apparatus decrypting an encrypted digital content using the stored device key to reproduce a digital content, the content reproduction apparatus storing index information that indicates the stored device key [fig. 8, 10, paragraphs 0206-0211, encryption unit 304 receives media key information and reads content from the content storage unit, next the encryption unit 304, encrypts the read content with the use of the received media key], and the index information being stored in the content reproduction apparatus such that the index information can be accessed from outside of the content reproduction apparatus [fig. 8, paragraphs 0193-0198, based on the ID information

stored by the recording apparatus, the position of the encrypted media key and the device key that is to be used may be determined], and the program causing the content reproduction apparatus to execute a method comprising

Outputting only the converted index information [fig. 2, 9, paragraph 0179, 0193, 0213-0216, based on the ID information in the reproduction apparatus 400a, analyze the header information stored in the recording medium 500c to specify the position of the encrypted media key to be decrypted and the device key to be used].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information corresponding to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose a display apparatus:

Receiving, from outside of the content reproduction apparatus, an instruction for outputting the index information from an index information storage unit of the content reproduction apparatus;

Converting the stored index information into a data format that is displayable on a screen of the display apparatus, the stored index information being converted based on the received instruction; and

However Takashima discloses converting data recorded on a recording medium and display it on a receiver device [fig. 25, 26, paragraph 0295, 0427], and

Receiving, from outside of the content reproduction apparatus, an instruction for outputting the index information from an index information storage unit of the content reproduction apparatus [paragraphs 0105, 0437, 0457, the information processing apparatus selects content subject to reproduction from content stored in an information

recording medium, this processing is executed on the basis of the user input through an input means connected to the information processing apparatus];

Converting the stored index information into a data format that is displayable on a screen of the display apparatus, the stored index information being converted based on the received instruction [fig. 5, 7, 24, paragraphs 0024, 0025, 0105, the title information and the index information are presentable to the user, the index is a content title that is presented onto a display, this index is recognizable by the user].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as disclosed by Takashima because it would provide the Nakano's apparatus with the enhanced capability of securely distributing, to particular users, information necessary for content reproduction, providing user convenience and amenity on communication between devices inside a network [Takashima, paragraphs 0008-0013].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACKIE ZUNIGA whose telephone number is (571)270-7194. The examiner can normally be reached on Monday - Friday 7:30 A.M to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Avellino can be reached on (571)272-3905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.Z./
Examiner, Art Unit 2458

/Joseph E. Avellino/
Supervisory Patent Examiner, Art Unit 2458